



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Essay

Youth perspective on chronic disease prevention



Published Online

April 29, 2022

[https://doi.org/10.1016/S2352-4642\(22\)00131-6](https://doi.org/10.1016/S2352-4642(22)00131-6)

For more on **Youth Participatory Action Research** principles see *New Dir Youth Dev* 2009; **2009**: 19–34

For more on **Youth Participatory Action Research** processes see *Youth Soc* 2015; **47**: 29–50

For **guidelines on adolescent participation and civic engagement** see <https://www.unicef.org/documents/engaged-and-heard-guidelines-adolescent-participation-and-civic-engagement>

Chronic diseases, climate change, mental health, and COVID-19 recovery are among the most serious challenges facing our generation, who account for one sixth of the global population. Yet, current approaches to chronic disease prevention are proving ineffective, with limited advocacy and leadership initiatives for young people to collaborate with researchers to improve chronic disease outcomes. Researchers are responsible for engaging with adolescents as active research partners and guarding against unconscious biases to shape actions that support adolescents to lead healthy lives.

Established in September, 2021, the Health Advisory Panel for Youth at the University of Sydney (HAPYUS) consists of 16 youth advisors aged 13–18 years from New South Wales in Australia, with a focus on chronic disease prevention. The youth advisory group is designed as a leadership initiative with the framework of collaboration informed by Youth Participatory Action Research principles, processes, and guidelines on adolescent participation and civic engagement. A key responsibility of our group is to provide advice to the research team on matters relating to adolescent chronic disease prevention.

In this Essay, we aim to provide first-hand insights on crucial issues that affect the wellbeing of young people living in Australia today. We have considered these issues within the context of the COVID-19 pandemic and climate change crisis, and examined their impact on the collective mental and physical health, as well as social engagement, of young people. Views were grounded in our lived experience and were gathered from the 16 HAPYUS members via three online group discussions and an online conversation thread between October, 2021, and February, 2022. We analysed and categorised the issues raised and have delineated these concerns as being of top priority: (1) inimical impact of the growing social media presence in the lives of young people, (2) incomplete or unbalanced nutritional intake, and (3) rise of physical inactivity. Collectively, we strongly feel that these issues are interconnected and interdependent, and should therefore be discussed in a multidimensional context with COVID-19, climate change, and mental health.

Our top concerns

Engaging with social media platforms is an everyday activity for many young people. Worryingly, social media platforms have been inundated with influencers who have the ability to promote or recommend certain products or services. As young people, we feel that influencers can use their profile to monetise the documentation of their lifestyles and exploit the vulnerability of younger audiences who idolise them. As such, the content viewed

on social media has a profound effect on young people, with potentially more negative than positive effects on their physical and mental health. For example, influencers often promote unrealistic expectations of body image and diets that are not endorsed by health professionals, as well as unattainable lifestyles (eg, unaffordable goods and services). The popularity of social media influencers can be attributed to promotional techniques such as body-focused content, testimonials, or heavily staged and curated content. The rising popularity of photo-editing applications has increased the ease with which influencers are able to perfect their online brand and persona, often portraying unrealistic and false body images. This enables them to feed off the insecurities of younger audiences and disguises advertisements as environmentally and socially conscious—for example, by exploiting the youth's climate change concerns with so-called greenwashing (ie, misleading advertising to make products seem environmentally friendly). We acknowledge that there are ethical influencers and qualified professionals on social media who are actively seeking to promote healthy lifestyles, but they are the minority.

The relationship between body image and social media use by young people is a concern. Body image concerns might be emerging among our peers from the lack of diversity and representation of people from different ethnicities and cultures on social media. This lack of representation is forming a subculture identity of only certain body types within traditional gendered spaces. For males, this is a muscular aesthetic associated with gym and fitness lifestyles, while for females this is a lean aesthetic associated with nutrition, yoga, and mental wellness. The content relating to exercise and diet culture might be fuelling these aesthetic projections. Many social media platforms, such as Instagram, have algorithms to recommend content based on past activity, thus potentially exacerbating the lack of representation.

On social media we see frequent content by lifestyle influencers of new workouts, personal training, and quick 10 min fixes. These exercise suggestions, apart from being unrealistic for many, might cast expectations of the need for continuous exercise and result in obsessive exercise behaviours. Furthermore, social media enables a highly toxic and competitive culture. For example, some individuals seek to actively display the inequality of access to methods of physical activity, such as hiring personal instructors, to reflect their socioeconomic status. This can be highly detrimental to the wellbeing and physical activity levels of the wider youth community. It is important for health professionals on social media to not support this

status quo and dismantle this normative environment. We recommend health professionals consider gender and culturally tailored health messages on social media when trying to curb these faux healthy and highly toxic expectations of physical activity.

Arguably, the most physically detrimental aspects of social media are the excessive dieting culture promoted by influencers, leading to nutritional deficiencies and, in severe cases, eating disorders among youth. Diet culture is promoted to general youth audiences and to young aspiring athletes. Primarily, the common aesthetics that young people view on social media are often holistically and scientifically uninformed, enforcing heteronormative and culturally biased standards, thus proving not conducive to the collective mental and physical wellbeing of diverse young audiences.

Next, we recognise that the rising commercialisation of food corporations and fast food chains is being driven by enticing advertisements and sponsorships with influencers. Notably, promotional content on social media is disguised as an insight into celebrities' or influencers' lives, making this type of advertising less obvious for young viewers compared to conventional advertisements on television or print media. Increasing levels of poor nutrition among youth is partly a result of exposure to misleading advertising by fast food chains and influencers promoting certain lifestyles and brands that are often expensive. Issues related to unbalanced nutrition intake, such as the rise in obesity among youth globally, can be linked to the manipulative promotional tactics used by major fast food outlets, which lead young audiences to make uninformed choices to eat unhealthy and highly processed foods. Fast food is also conveniently priced at much lower costs than healthy foods, proving to be a more attractive choice for young people who might be financially disadvantaged. During the COVID-19 pandemic, takeout and home delivery have become popular options, and food corporations have benefitted from so-called COVID washing, a branding tactic that disguises manipulative advertising as philanthropy (eg, helping small businesses).

Another key issue for young people is misinformation of nutrition information, particularly on social media. For example, social media often promotes fresh and organic foods and supplements as healthy. Many young people might not be aware that the definition of organic is vague and does not guarantee anything about health, yet such advertising misleads young people to believe that these products are associated with health. Many organic foods are also expensive and inaccessible, which perpetuates the belief that having a healthy lifestyle is associated with wealth.

Recommendations

We recommend a two-tiered, multi-sector, and tailored approach to bolstering the health of young people. Tier 1 programmes should focus on creating awareness of social

media use and addressing social media literacy. Topics could comprise evaluating social media for objective and well informed content versus misleading content, increasing knowledge on well balanced diet and physical activity, promoting awareness on mental health issues, and coping with consequences of the pandemic and climate change anxieties. Tier 2 builds on the acquired awareness and literacy with concrete guidance for implementation into daily life, such as affordable shopping lists and recipes for well balanced diets, suggestions for local opportunities for physical activity, and local mental health support. These programmes should be equally engaging and convincing as the plethora of promotional content on social media. To maximise accessibility, the programmes should be integrated within the school curriculum, conducted through educational seminars within schools, delivered by health and nutrition professionals in collaboration with young people. These interactive sessions would be of great benefit, especially to younger adolescents who are beginning to use social media. Facilitated discussions among peers can also provide insights into the evolution of youth interaction and experiences on social media. Additionally, such initiatives should be customised for specific age groups, genders, and cultures, providing them with the most relevant and appropriate information while addressing the financial barriers surrounding healthy diets. But most importantly, lawmakers and industry bodies should also be held accountable with stricter regulations for advertisements on TV, print media, and social media.

Researchers, policy makers, and governments need to consider the ramifications of COVID-19 restrictions and the long periods of lockdown on the ability for young people to access physical activity opportunities. During this time in Australia, sports and recreation centres, open public spaces, and sports grounds were closed, hindering opportunities for young people to be physically active and socially engaged. However, reduced physical activity in younger people could also be attributed to the near-omnipresence of digital media that facilitates prolonged screentime. Also, pre-pandemic costs associated with facilities such as gyms and indoor recreational spaces have led many young people to resort to internet trends led by influencers that often promote misinformed fitness regimens.

Interestingly, despite the subsequent lifting of lockdowns in Australia, the reduction of physical activity has partly remained, as young people became gradually more involved with online activities. Virtual communities provide an increasing substitute for sport and social activities, which will likely increase over coming years with the rise of the metaverse, an anticipated future three-dimensional iteration of the internet. School sport programmes have resumed, albeit encouraging face masks, but are not providing enough incentive for adequate physical activity throughout the week. Furthermore, competitive

For the 2021 UNICEF Australia Young Ambassador Report see <https://www.unicef.org.au/our-work/unicef-in-emergencies/coronavirus-covid-19/childrens-voices>

For more on chronic disease burden in adolescents see *Articles Lancet* 2019; **393**: 1101–18

For more on adolescent health research agendas see *Front Public Health* 2021; **9**: 789535

For more perspectives on adolescent voices in the chronic disease discourse see *Int J Non-Comm Dis* 2018; **3**: 45–48

interschool events are now open to limited students upon expressions of interest, possibly reducing attendance of first-time participants due to increased exclusivity. High self-isolation rates due to spiking levels of COVID-19 infections among school-aged children (and teaching staff) after the reopening of schools pose an additional hurdle for returning to pre-pandemic levels of physical activity.

It is also important to acknowledge the socioeconomic, physical, and psychological barriers that the pandemic has exacerbated. To improve physical inactivity, governments and local community organisations must remove the barriers highlighted by their community and make it as easy as possible for young people to be physically active. Solutions could include opening recreational spaces for safe, physically distanced public use, along with free, tailored programmes, digital resources, and instruction sheets to support individuals and communities to participate in regular physical activity.

Conclusions and future directions

The top issues identified by HAPYUS are interconnected through the digitalisation and commercialisation of health and wellbeing on social media. These issues have been exacerbated by the COVID-19 pandemic and will continue to be amplified with ongoing global issues such as climate change. As a result, young people around the world face numerous barriers and adverse influences that pose harmful threats to their physical and mental health.

The overall health and wellbeing of adults have been shown to improve through awareness, education and prevention programmes, and targeted chronic disease management initiatives. However, similar initiatives for youth have not had the same desired impact, and young people need supportive digital and physical environments. The likely reasons for this, as highlighted above, are the susceptibility of youth to messages and trends promoted on social media, and government initiatives that do not consider the barriers that many young people face. Currently, governments spend more money on treating chronic diseases than preventing them, and prevention can start in youth and with youth. Thus, future programmes, initiatives, and strategies should account for youth-specific

needs, such as diverse social media campaigns to effectively counteract the inimical consequences of influencer health trends that target young people. Critically, young people need to be actively engaged as collaborators to address these issues.

The top issues expressed above align with findings in national and international reports by young people that call for greater action by governments and decision makers. Despite concerted efforts by adolescent health researchers to understand and evaluate chronic disease prevention initiatives and policies, there has been no easing of the chronic disease burden since 1990, and many adolescent chronic disease risks factors have increased in prevalence. To date, research agendas for the prevention of chronic disease in adolescents are still almost entirely driven and implemented by adults. In 2017, at a community of practice focused on youth and chronic diseases, convened by the WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases, it was found the vast majority of adolescents believed that adolescent voices in the chronic disease discourse have been tokenistic and frequently dismissed. It is now well recognised that involving consumers can add value to health research and researchers have a right and responsibility to include consumers. The HAPYUS leadership initiative will work towards generating solutions to address these issues via a systems-based approach that is working towards fostering long-term collaborations between adolescents, researchers, and policy makers.

†Radhika Valanju, †Meera Barani, †Dominik Mautner, Imeelya Al Hadaya, Alexi Cross, Melani Gunawardana, Ava Lambie, Emily McMahon, Arnav Narula, Bowen Ren, Dominique R, Aviral Sharda, Alexander Sinnett, Azman Tanvir, Henrik Tran, Fulin Yan, Mariam Mandoh, Hoi Lun Cheng, Seema Mhrshahi, Philayrath Phongsavan, Julie Redfern, Rebecca Raeside, *Stephanie R Partridge stephanie.partridge@sydney.edu.au

†Equal contribution

See appendix for author affiliations, contributions, and further reading.

See Online for appendix